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Service Manual

LCD TV For 232-S12

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Approval	Made by	Revise by	Revise by
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1. Introduction

1-1 Preface

This service manual describes module-level LCD TV repair for qualified service personnel. This service manual also includes selected production troubleshooting information for electronic technicians and engineers.

1-2 Caution

This service manual contains important safeguards and instructions that must be followed for the safe and proper servicing of this TV.

1-3 Warning

- 1. Advise customers to follow all operating instructions and safety precautions that have been furnished with the product.
- 2. Unplug the ac line cord before cleaning or disassembling the product.
- 3. Check the ac line cord and plug for wear or damage and replace as necessary.
- 4. Do not use liquid cleaners or aerosol cleaners to clean the display.
- 5. Do not place the product on an unstable table or cart. It can cause the product to fall, resulting in injury and product damage. If a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 6. Use only replacement parts specified by the manufacturer or replacement parts with the same performance and safety characteristics. Use of substitute parts with different characteristics can result in fire or electric shock.
- 7. Do not hit the LCD panel. In case of breakage, use care when removing broken glass.
- 8. Keep the product away from heat sources such as radiators, heaters, stoves, and other heat-generating apparatus.
- 9. Do not block any ventilation openings.
- 10. Do not use the product near water; for example, near a bathtub, washbasin, kitchen sink laundry tub, in a wet basement, or near a swimming pool.
- 11. If the product uses a grounded-type ac plug and line cord, but the location has a 2-prong receptacle, advice the customer to contact a qualified electrician to replace the outlet.

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2. Specifications

PRODUCT SPECIFICATIONS

LCD Panel 32" TFT

Power Management (Standby Mode)

< 1W

Displayable Resolution VGA 1360*768 max.

Pixel Pitch 0.17025mm x 0.51075mm x RGB

LCD Display Color 16.7M colors(8-bits colors).

Viewing Angle

178(H)/178(V) (CR>10)

Response Time 8ms (Gray to Gray)

Active Display Area 697.685mm x 392.256mm (31.51" diagonal)

RF Tuner

Combo RF (NTSC/ATSC)

Power Voltage: 100~240 V

Consumption: 164W

Speaker 10W

Compliance FCC, cUL, CSA, Energy Star

Temperature Operating: -10°C~40°C

Storage: -10°C~60°C

Weight w/o stand

33.63lbs

Weight w/ stand

35.5lbs

Gross Weight

45.421lbs

Dimensions (WxDxH)

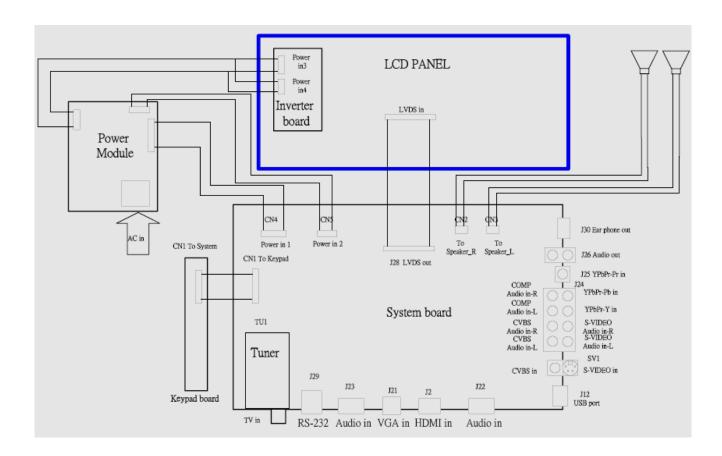
37.76 inches x 9.37 inches x 22.20 inches

Carton Dimensions

(WxDxH) 42.80 inches x 12.40 inches x 25.35 inches

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3. Wiring Diagram

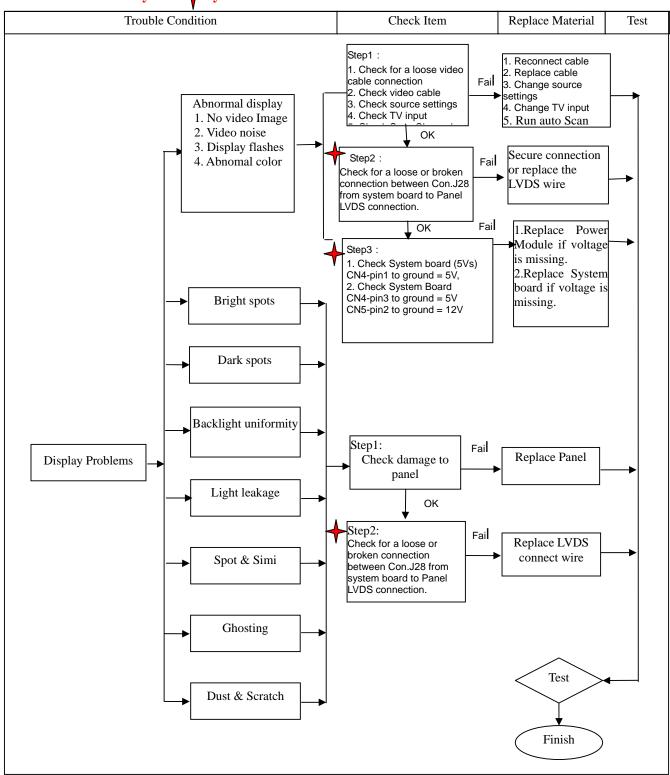


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4. Trouble shooting flow chart

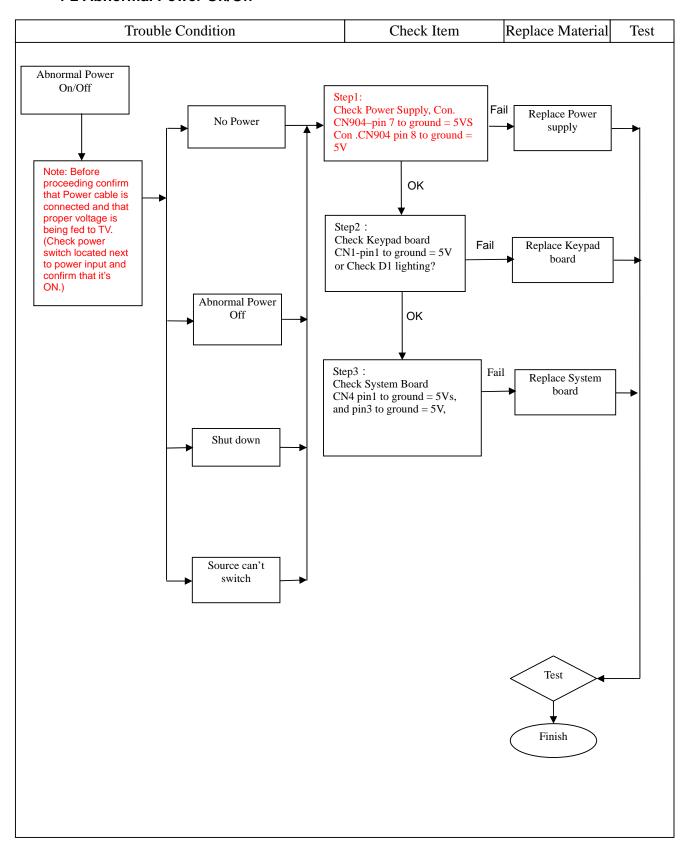
4-1 Display Problems

Note: Refer to the Wiring Diagram during troubleshooting for a visual of inter-connections when indicated by this \clubsuit symbol.



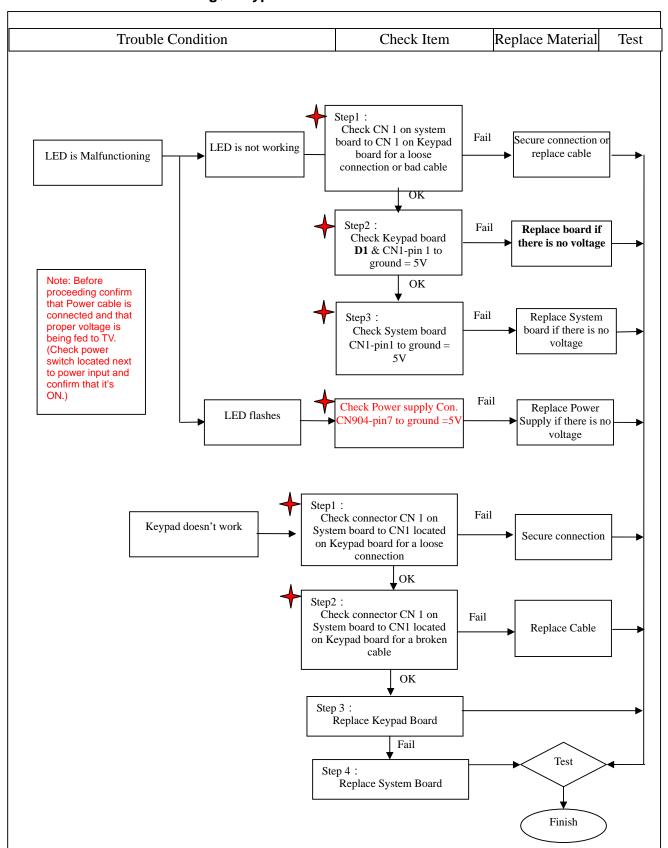
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4-2 Abnormal Power On/Off



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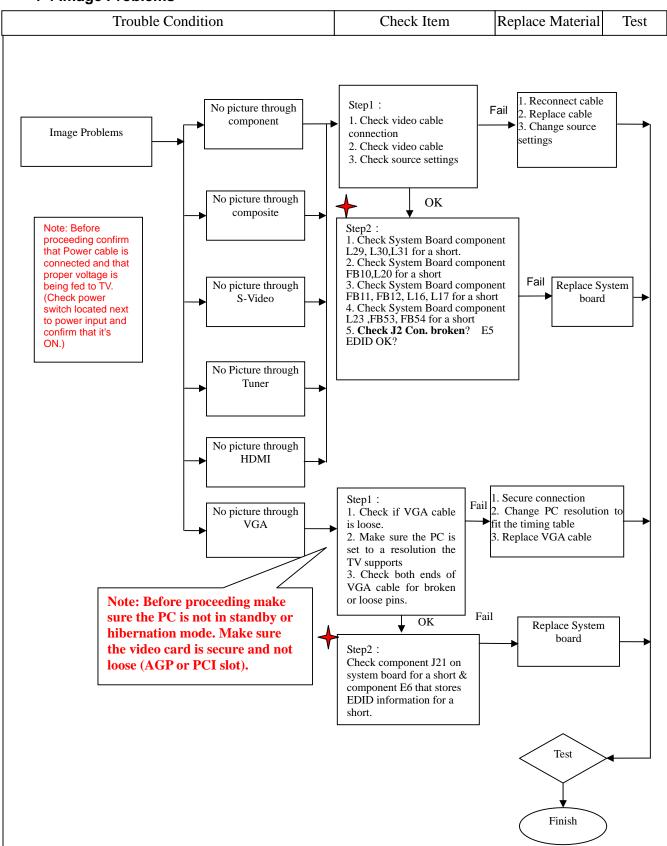
4-3 LED is Malfunctioning、Keypad Problem



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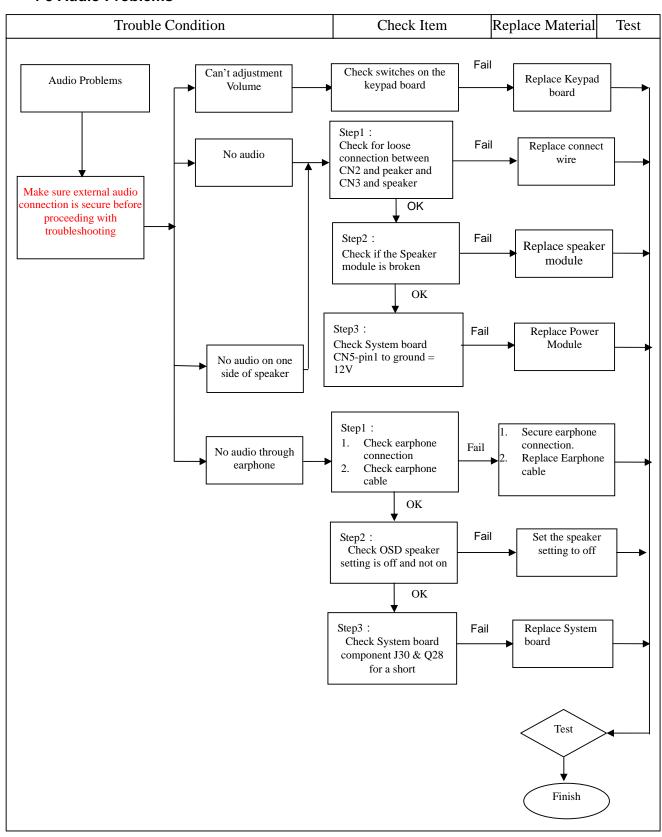
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4-4 Image Problems



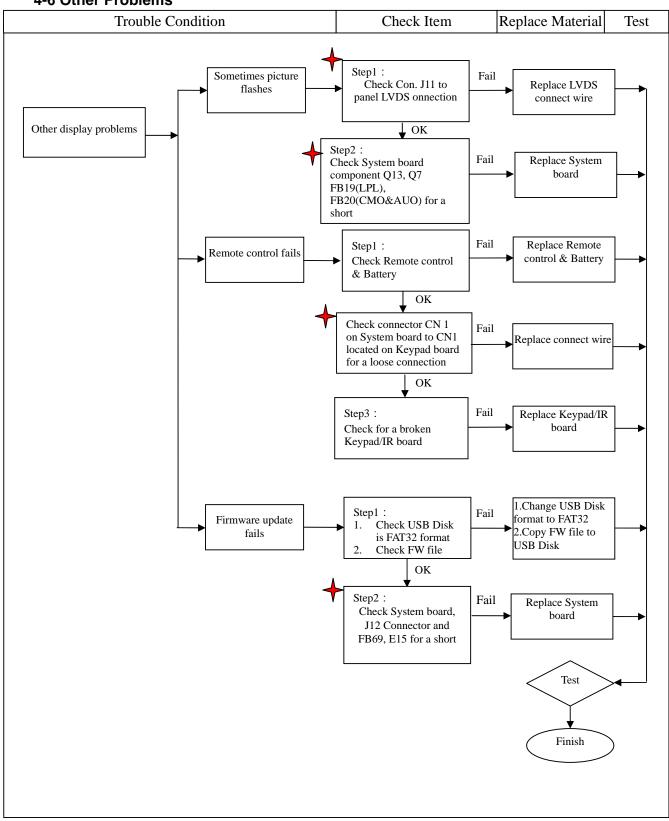
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4-5 Audio Problems



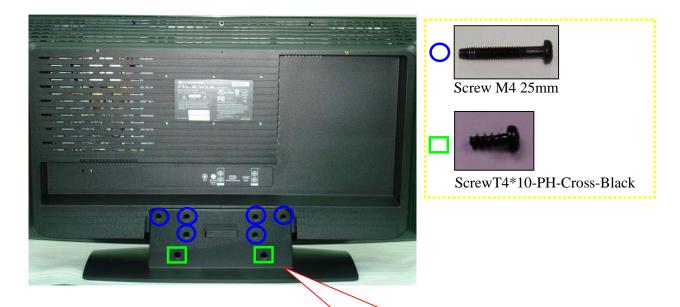
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4-6 Other Problems



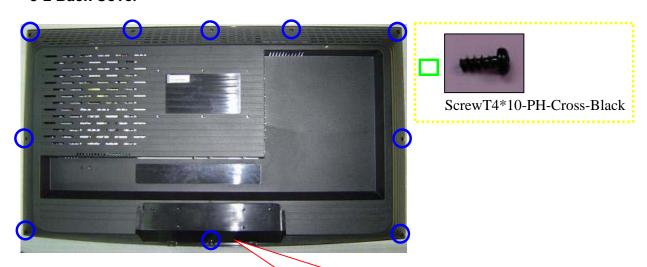
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5. Disassembly 5-1 Stand



- 1. Loosen and remove 8 screws.
- 2. Safely remove the **Stand**.

5-2 Back Cover

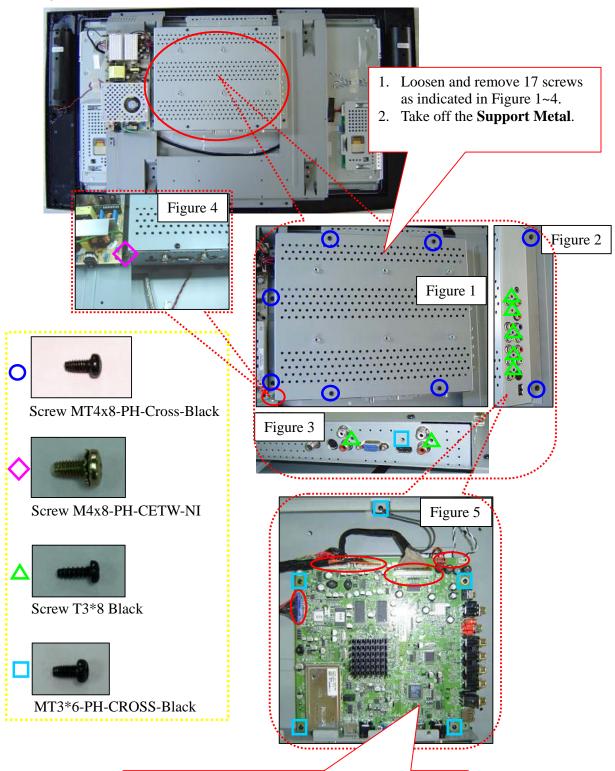


- 1. Loosen and remove 10 screws.
- 2. Safely remove the **Back Cover**.

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5-3 System Board



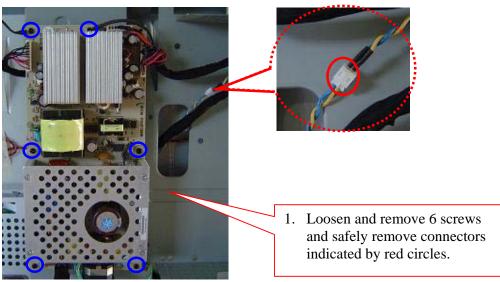
- 3. Loosen and remove 5 screws and safely remove connectors as indicated by red circles on Figure 5.
- 4. Take off the **System Board**.

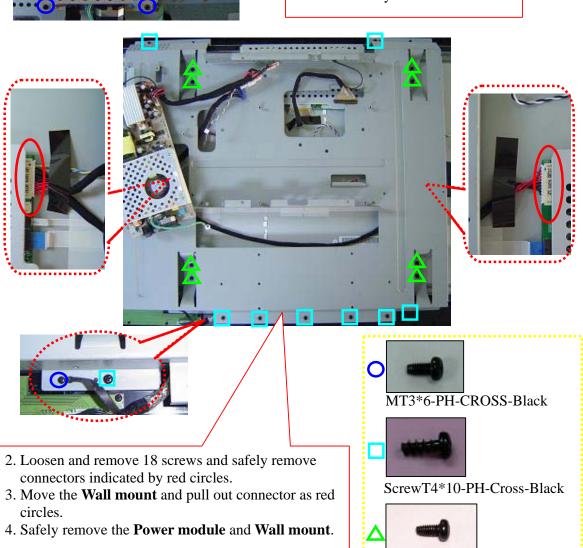
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Screw MT4x8-PH-Cross-Black

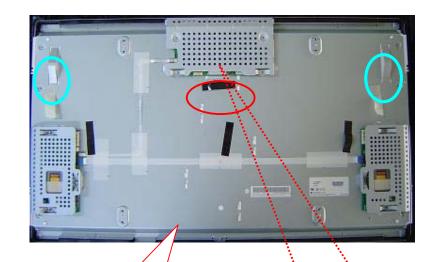
5-4 Power Module



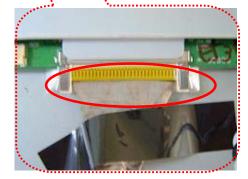


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5-5 Panel Module



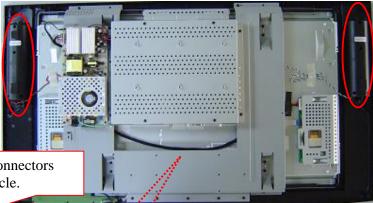
- Safely remove the LVDS wire indicated by red circles.
 Remove the panel housing.



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5-6 Speakers

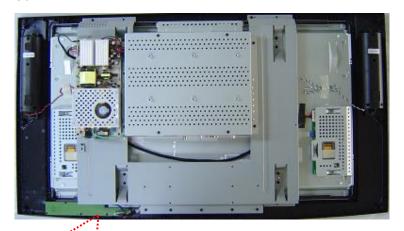


1. Gently remove the speaker connectors that are indicated by a red circle.

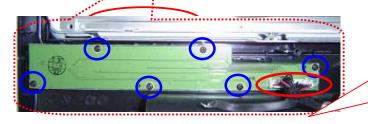


2. Safely remove speakers.

5-7 Keypad Board







- 1. Loosen and remove 6 screws that are indicated by blue circles.
- 2. Genntly remvoe connector indicated by a red circle.
- 3. Safely remove the **Keypad board**.

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6. Firmware upgrade

Olevia Firmware Updating Instructions

What does this do?

This process installs a new version of the firmware and fixes the past bugs.

What products does this instruction apply to?

Model: Olevia 227, 232, 427, 432, 527 and 532

What do you need before installing?

- 1. A compatible USB thumb drive
- 2. A Computer with Microsoft® Windows® 2000 or Microsoft® Windows® XP operating systems.

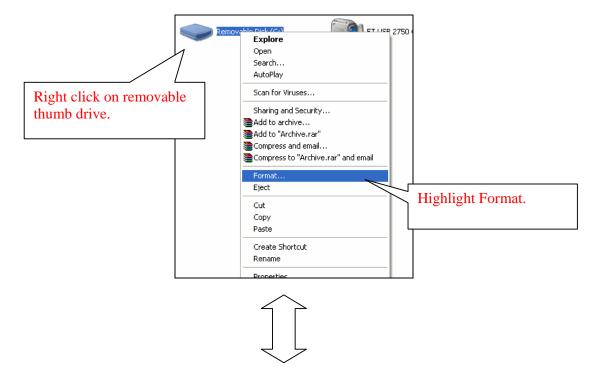
Important Notes:

- 1. To make sure that no other files are in the thumb drive.
- 2. It is highly recommended to print the instructions as a reference before installing.

Loading Instructions:

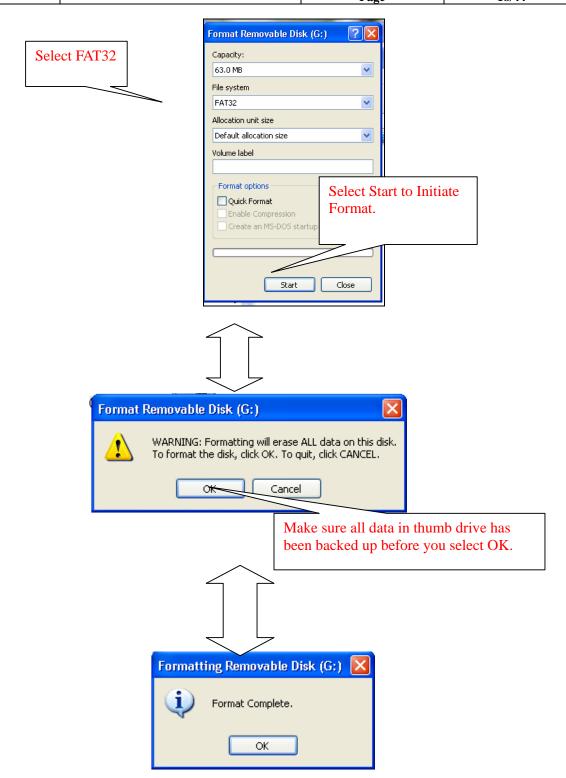
- 1. Review the available downloads, the bugs fixed, and the new features added.
- 2. Follow the instructions on the firmware download section to successfully download and load firmware into the TV.

Note: USB thumb drive must be formatted in FAT32 for detection.



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- 3. After you have located the firmware, download it to a thumb drive. There are five different files.
- 4. Turn TV off and insert the USB thumb drive into the TVs USB input.
- 5. Turn TV power on, OLEVIA screen will pop up and after a few seconds a blue bar and will appear on the lower part of the screen covering the whole image from left to right, then a red bar.
- 6. Once the firmware loading is complete the TV will turn on and initial Home/Showroom option screen will appear.
- 7. Check under OSD menu Firmware Version and make sure that it matches with that of thumb drive. (Menu → Setup → Firmware Version)
- 8. Take off the thumb drive.
- 9. For more help, please call our technical support at 1-866-9OLEVIA (965-3842)

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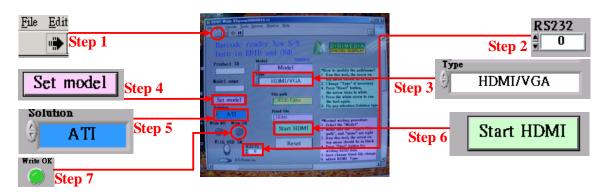
7. EDID write in and ADC correction and Parameter Adjustment

7-1 EDID write in

7-1.1 EDID tools

- 1. PC (Notebook)
- 2. Software (EDID Write EEprom20060816.exe) and confirm Personal computer hard disk Have 2 files (1. C:\EDID Editor(including Hex files) 2.C:\LCD TV\DATA(product and record had No.)
- 3. EDID PCBA tool, USB cable, RS232 mini din, Print cable, VGA cable

7-1.2 EDID write in



- Open Labview EDID Writ Eeprom20060816 file, and confirm software Keep Running. (Refer Step 1)
- 2. choice RS-232 (PC System)Port No.(Refer Step 2), choice burn in type (Refer Step 3)
- 3. press Set Model button(Refer Step 4), and key in 232-S12. and confirm Scalar solution (Refer Step 5)
- 4. confirm EDID Jig PCBA (printer port and USB A-B Line connect to PC, HDMI line to TV first , MinDim RS-232 to TV)
- 5. and then press Button (Refer Step 6), then open a save file path in widow.



- 6. First write HDMI EDID code, if finish OK you can find green light. (Refer Step 7)
- 7. And have a message that change EDID Jip PCBA VGA Cable to TV.(HDMI line must leave

PCBA Jig.)

Switch cable to VGA port!

OK!

Cancell

,if write OK you can fine green light

and show the

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message that change next set.

7-2 ADC correction and Parameter adjustment

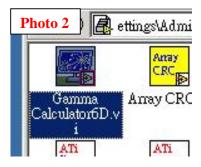
ADC correction and Parameter adjustment tools:

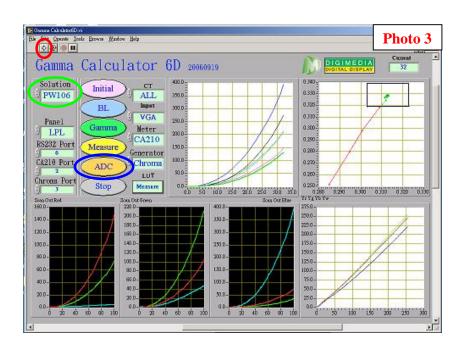
- 1. PC (Notebook)
- 2. CHROMA 2325
- 3. MINOLTA CA-210
- 4. Software (Gamma Calculator6A Jason.exe)

7-2.1 ADC correction

- 1. Click the icon on the desk "Gamma Calculator" (please see **Photo 1**), and then **Photo 2** would show up.
- 2. Click the icon "Gamma Calculator" of **Photo 2**, and then **Photo 3** would show up.
- 3. Connect "RS232" &"VGA" with TV.
- 4. click the "arrow mark" (which is circle by red) in **Photo 3**, and then click the icon "ADC" also in **Photo 3** blue circle.
- 5. The window will show up with the instruction about component, and then connecting component instead of VGA port.
- 6. The ADC process is completed once the window with the message "OK" shows up.







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Attention:

- 1. Please make sure it's under "VGA Source" before processing ADC.
- 2. Please pay attention to different solution for ATI/MTK8202/PW106 as Photo 3 green circle.
- 3. Please make sure the set-up for RS232 is correct.

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7-2.2 Parameter adjustment

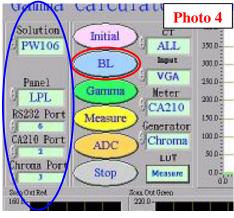
- 1. Click the icon on the desk "Gamma Calculator" (please see Photo 1), and then Photo 2 would show up.
- 2. Click the icon "Gamma Calculator" of **Photo 2**, and then **Photo 3** would show up.
- 3. Please follow (as **Photo 4** blue circle) to choose the solution & panel mode.
- 4. Connect the "RS232, USB, VGA changeful wire, and audio wire" with TV. And then connect the other side of VGA changeful wire with the pattern generator, and set up the TV source under "VGA". And please locate the "CA-210" on center of TV screen.
- 5. Click "BL" button, and the window with "Gamma adjustment" message would show up. Please click "OK" for next step. (as **Photo 4** red circle)
- 6. Adjust the GAMMA (R;G;B) and then click the button "Enter" after GAMMA adjustment is completed.(Please follow Photo 5, 6)
- 7. Please check the result.

Attention:

Check pattern points for adjustment

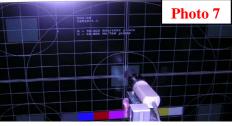
(CHROMA PROGRAM: 71 1360 FT VGA):

- 1. Check if the frame is damaged and if the size is smaller than normal, or if those points in the 5 squares correspond well. (Photo 7)
- 2. Each gray bar should be identified with only pure color.(Photo 8)
- 3. 256 Gray. L->R--->check if there is sync (influenced by high frequency). (Photo 9)







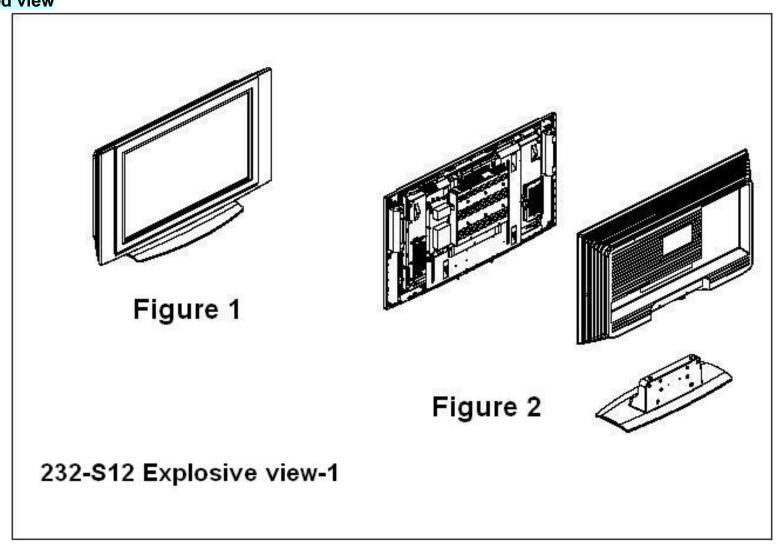




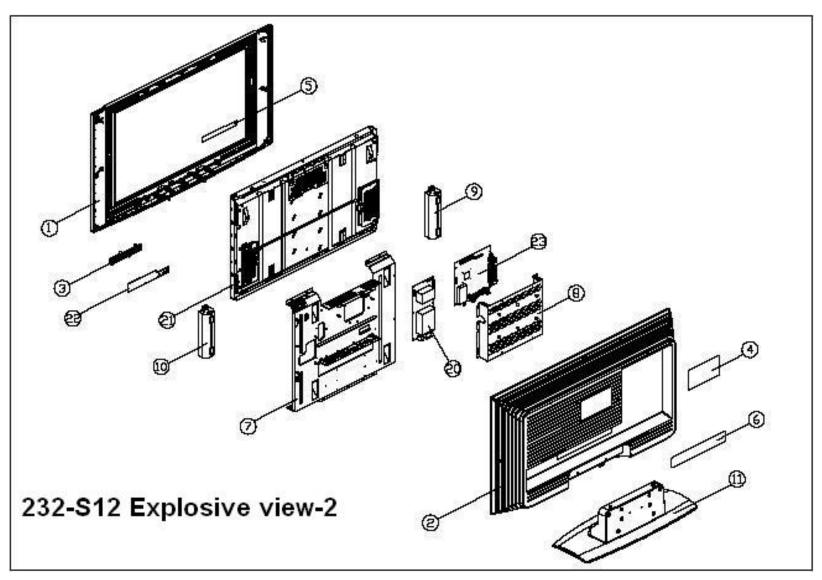


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8. Exploded view



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9. Parts List and Photo

9-1 PARTS LIST

	232-S12 Parts List (FM1-032000EGS42)								
Item	Parts Name	Parts NO.	Q'th	Item	Parts Name	Parts NO.	Q'th		
1	32C_S_LPL_FRONT _MODULE	SC1-0000142G000	1	21	LPL 32" LCD Panel w/ AI+Sync	ELP-321SL01G000	1		
2	32C_S_Back_Module	SC1-0000143G000	1	22	P0517 Keypad PCBA	SC0-P517701GAD0	1		
3	32_37C_KEYPAD_BUTTON	MP0-0000497G000	1	23	ADA1 PCBA R0.7(for 32" LPL P/N)	SC0-P517207GADL	1		
4	232-S12 Marketing Label	ML0-1000090G000	1	24	32C LPL LVDS wire-Al	ECB-5LC0123G000	1		
5	527_532 tech label-GP	ML0-0000313G001	1	25	32C kp. wire no tape	ECB-5KP0455G000	1		
6	ATI GRAPHIC LABEL_26/27/32	ML0-0000285G000	1	26	Magnet buckle-B15-UH-13x23x7	EEC-PLB15UHG000	2		
7	Support Metal Assy_ATI-A	SX0-0000269G001	1	27	Clip Core	EEC-PLLF150G000	1		
8	32C WALLMOUNT MODULE_ATI	SX0-0000265G000	1	28	32C(S) Cush Top	MP2-1000026G000	1		
9	32C_SPEAKER_MODULE_RIGHT	SX0-0000245G000	1	29	32C(S) Cush Bottom	MP2-1000027G000	1		
10	32C_SPEAKER_MODULE_LEFT	SX0-0000246G000	1	30	32C_side EPE Bag	MP2-0000161G000	1		
11	32C Stand Cover	MP0-0000500G000	1	31	232-S12 Carton_w/GP logo	MX0-3000256G000	1		
12	32 FOOT PAD	MM0-0000034G000	6	32	AC Power Cord	ECB-0318AW8G000	1		
13	Flat Cable Clip_FAA51-PG	EEC-FCFAA51G000	1	33	LT23HVT Remote control	EEC-RC0CG37G000	1		
14	Screw T4*10-PH-Cross-Black	MS0-1A34010G000	21	34	CD-En-Fr_ATi_MTK (2 Series-1)	MD0-CD00040G000	1		
15	SCREW T3*8 Black	MS0-WA33008G000	13	35	2 Series Warranty Card w/ 226	MK0-UM00132G000	1		
16	Screw MT4*8-NI	MS0-FA14008G000	1	36	Battery 1.5V AAASize, GP(NV-UM4E)	EEC-BAGP24GG000	2		
17	SCREW MT4*8-PH-CROSS-BLACK	MS0-WA34008G000	16	37	Olevia_HookUp_8_(En/Fr)	MK0-UM00124G000	1		

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18	SCREW MT3*6-PH-CROSS-Black	MS0-A133006G000	13	38	Ziploc bags#10(W/O LOGO)	MX0-0000025G000	1
19	Screw M4 25mm	MS0-1A34025G000	6	39	QSG-En-Fr_ATi_226_227_232	MK0-QS00059G000	1
20	32" ARESTECH Power Module for LPL	EEC-PW32LPLG000	1	40	32 PANEL PROTECTION FILM	MP0-0000318G000	1

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9-2 PARTS PHOTO

Item NO: 1

Parts name: 32C_S_LPL_FRONT_MODULE

Parts NO: SC1-0000142G000



Item NO: 2

Parts name: 32C_S_Back_Module

Parts NO: SC1-0000143G000



Item NO: 3

Parts name: 32_37C_KEYPAD_BUTTON

Parts NO. : MP0-0000497G000



Item NO: 4

Parts name: 232-S12 Marketing Label

Parts NO. : ML0-1000090G000



Item NO: 5

Parts name: 527_532 tech label-GP

Parts NO. : ML0-0000313G001



Item NO: 6

Parts name: ATi GRAPHIC LABEL_26/27/323

Parts NO. : ML0-0000285G000



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Item NO: 7

Parts name: Support Metal Assy_ATI-A

Parts NO:

SX0-0000269G001



Item NO: 8

Parts name: 32C WALLMOUNT MODULE_ATI

Parts NO. :

SX0-0000265G000



Item NO: 9

Parts name: 32C_SPEAKER_MODULE_RIGHT

Parts NO. : SX0-0000245G000



Item NO: 10

Parts name: 32C_SPEAKER_MODULE_LEFT

Parts NO. : SX0-0000246G000



Item NO: 11

Parts name: 32C Stand Cover

Parts NO. : MP0-0000500G000



Item NO: 12

Parts name: 32 FOOT PAD

Parts NO. : MM0-000034G000



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Item NO: 13

Parts name: Flat Cable Clip_FAA51-PG

Parts NO. : EEC-FCFAA51G000



Item NO: 14

Parts name: Screw T4*10-PH-Cross-Black

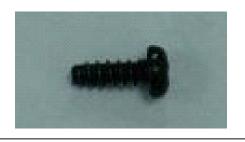
Parts NO. : MS0-1A34010G000



Item NO: 15

Parts name: SCREW T3*8 Black

Parts NO. : MS0-WA33008G000



Item NO: 16

Parts name: Screw MT4*8-NI

Parts NO. : MS0-FA14008G000



Item NO: 17

Parts name: SCREW MT4*8-PH-CROSS-BLACK

Parts NO. : MS0-WA34008G000



Item NO: 18

Parts name: SCREW MT3*6-PH-CROSS-Black

Parts NO. : MS0-A133006G000



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Item NO: 19

Parts name: Screw M4 25mm

Parts NO. : MS0-1A34025G000



Item NO: 20

Parts name: 32" ARESTECH Power Module for LPL

Parts NO. : EEC-PW32LPLG000



Item NO: 21

Parts name: LPL 32" LCD Panel w/ Al+Sync

Parts NO. : ELP-321SL01G000



Item NO: 22

Parts name: P0517 Keypad PCBA

Parts NO. : SC0-P517701GAD0



Item NO: 23

Parts name: ADA1 PCBA R0.7(for 32" LPL P/N)

Parts NO: SC0-P517207GADL



Item NO: 24

Parts name: 32C LPL LVDS wire-Al

Parts NO. : ECB-5LC0123G000



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Item NO: 25

Parts name: 32C kp. wire no tape

Parts NO. : ECB-5KP0455G000



Item NO: 26

Parts name: Magnet buckle-B15-UH-13x23x7

Parts NO. : EEC-PLB15UHG000



Item NO: 27

Parts name: Clip Core

Parts NO. : EEC-PLLF150G000



Item NO: 28

Parts name: 32C(S) Cush Top

Parts NO. : MP2-1000026G000



Item NO: 29

Parts name: 32C(S) Cush Bottom

Parts NO. : MP2-1000027G000



Item NO: 30

Parts name: 32C_side EPE Bag

Parts NO. : MP2-0000161G000



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Item NO: 31

Parts name: 232-S12 Carton_w/GP logo

Parts NO. : MX0-3000256G000



Item NO: 32

Parts name: AC Power Cord

Parts NO. : ECB-0318AW8G000



Item NO: 33

Parts name: LT23HVT Remote control

Parts NO. : EEC-RC0CG37G000



Item NO: 34

Parts name: CD-En-Fr_ATi_MTK (2 Series-1)

Parts NO. : MD0-CD00040G000



Item NO: 35

Parts name: Series Warranty Card w/ 226

Parts NO. : MK0-UM00132G000



Item NO: 36

Parts name: Battery 1.5V AAASize, GP(NV-UM4E)

Parts NO. : EEC-BAGP24GG000



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Item NO: 37

Parts name: Olevia_HookUp_8_(En/Fr)

Parts NO. : MK0-UM00124G000



Item NO: 39

Parts name: QSG-En-Fr_ATi_226_227_232

Parts NO. : MK0-QS00059G000

Item NO: 40

Parts name: 32 PANEL PROTECTION FILM

Parts NO. : MP0-0000318G000



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9-3 PARTS LIST (Low bright Panel)

	232-S12 (LB) Parts List (FM1-032000EGS49)								
Item	Parts Name	Parts NO.	Q'th	Item	Parts Name	Parts NO.	Q'th		
1	32C_S_LPL_FRONT _MODULE	SC1-0000142G000	1	21	LPL 32" Panel_low brightness	ELP-32LCSLBG000	1		
2	32C_S_Back_Module	SC1-0000143G000	1	22	P0517 Keypad PCBA	SC0-P517701GAD0	1		
3	32_37C_KEYPAD_BUTTON	MP0-0000497G000	1	23	ADA1 PCBA R0.7(for 32" LPL P/N)	SC0-P517207GADL	1		
4	232-S12 Marketing Label	ML0-1000090G000	1	24	32C LPL LVDS wire-AI	ECB-5LC0123G000	1		
5	527_532 tech label-GP	ML0-0000313G001	1	25	32C kp. wire no tape	ECB-5KP0455G000	1		
6	ATi GRAPHIC LABEL_26/27/32	ML0-0000285G000	1	26	Magnet buckle-B15-UH-13x23x7	EEC-PLB15UHG000	2		
7	Support Metal Assy_ATI-A	SX0-0000269G001	1	27	Clip Core	EEC-PLLF150G000	1		
8	32C WALLMOUNT MODULE_ATI	SX0-0000265G000	1	28	32C(S) Cush Top	MP2-1000026G000	1		
9	32C_SPEAKER_MODULE_RIGHT	SX0-0000245G000	1	29	32C(S) Cush Bottom	MP2-1000027G000	1		
10	32C_SPEAKER_MODULE_LEFT	SX0-0000246G000	1	30	32C_side EPE Bag	MP2-0000161G000	1		
11	32C Stand Cover	MP0-0000500G000	1	31	232-S12 Carton_w/GP logo	MX0-3000256G000	1		
12	32 FOOT PAD	MM0-0000034G000	6	32	AC Power Cord	ECB-0318AW8G000	1		
13	Flat Cable Clip_FAA51-PG	EEC-FCFAA51G000	1	33	LT23HVT Remote control	EEC-RC0CG37G000	1		
14	Screw T4*10-PH-Cross-Black	MS0-1A34010G000	21	34	CD-En-Fr_ATi_MTK (2 Series-1)	MD0-CD00040G000	1		
15	SCREW T3*8 Black	MS0-WA33008G000	13	35	2 Series Warranty Card w/ 226	MK0-UM00132G000	1		
16	Screw MT4*8-NI	MS0-FA14008G000	1	36	Battery 1.5V AAASize, GP(NV-UM4E)	EEC-BAGP24GG000	2		
17	SCREW MT4*8-PH-CROSS-BLACK	MS0-WA34008G000	16	37	Olevia_HookUp_8_(En/Fr)	MK0-UM00124G000	1		
18	SCREW MT3*6-PH-CROSS-Black	MS0-A133006G000	13	38	Ziploc bags#10(W/O LOGO)	MX0-0000025G000	1		

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19	Screw M4 25mm	MS0-1A34025G000	6	39	QSG-En-Fr_ATi_226_227_232	MK0-QS00059G000	1	
20	32" ARESTECH Power Module for LPL	EEC-PW32LPLG000	1	40	32 PANEL PROTECTION FILM	MP0-0000318G000	1	

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9-4 PARTS PHOTO (Low bright Panel)

Item NO: 1

Parts name: 32C_S_LPL_FRONT_MODULE

Parts NO: SC1-0000142G000



Item NO: 2

Parts name: 32C_S_Back_Module

Parts NO: SC1-0000143G000



Item NO: 3

Parts name: 32_37C_KEYPAD_BUTTON

Parts NO. : MP0-0000497G000



Item NO: 4

Parts name: 232-S12 Marketing Label

Parts NO. : ML0-1000090G000



Item NO: 5

Parts name: 527_532 tech label-GP Parts

NO.: ML0-0000313G001



Item NO: 6

Parts name: ATi GRAPHIC LABEL_26/27/323

Parts NO. : ML0-0000285G000



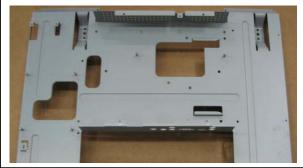
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Item NO: 7

Parts name: Support Metal Assy_ATI-A

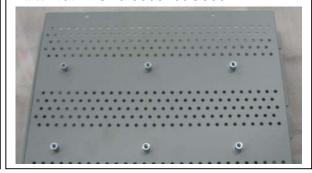
Parts NO. : SX0-0000269G001



Item NO: 8

Parts name: 32C WALLMOUNT MODULE_ATI

Parts NO. : SX0-0000265G000



Item NO: 9

Parts name: 32C_SPEAKER_MODULE_RIGHT

Parts NO. : SX0-0000245G000



Item NO: 10

Parts name: 32C_SPEAKER_MODULE_LEFT

Parts NO. : SX0-0000246G000



Item NO: 11

Parts name: 32C Stand Cover

Parts NO. : MP0-0000530G000



Item NO: 12

Parts name: 32 FOOT PAD

Parts NO. : MM0-000034G000



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Item NO: 13

Parts name: Flat Cable Clip_FAA51-PG

Parts NO. : EEC-FCFAA51G000



Item NO: 14

Parts name: Screw T4*10-PH-Cross-Black

Parts NO. : MS0-1A34010G000



Item NO: 15

Parts name: SCREW T3*8 Black

Parts NO. : MS0-WA33008G000



Item NO: 16

Parts name: Screw MT4*8-NI

Parts NO. : MS0-FA14008G000



Item NO: 17

Parts name: SCREW MT4*8-PH-CROSS-BLACK

Parts NO. : MS0-WA34008G000



Item NO: 18

Parts name: SCREW MT3*6-PH-CROSS-Black

Parts NO. : MS0-A133006G000



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Item NO: 19

Parts name: Screw M4 25mm

Parts NO. : MS0-1A34025G000



Item NO: 20

Parts name: 32" ARESTECH Power Module for LPL

Parts NO. : EEC-PW32LPLG000



Item NO: 21

Parts name: LPL 32" Panel_low brightness

Parts NO.: ELP-32LCSLBG000



Item NO: 22

Parts name: P0517 Keypad PCBA

Parts NO. : SC0-P517701GAD0



Item NO: 23

Parts name: ADA1 PCBA R0.7(for 32" LPL P/N)

Parts NO: SC0-P517207GADL



Item NO: 24

Parts name: 32C LPL LVDS wire-Al

Parts NO. : ECB-5LC0123G000



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Item NO: 25

Parts name: 32C kp. wire no tape

Parts NO. : ECB-5KP0455G000



Item NO: 26

Parts name: Magnet buckle-B15-UH-13x23x7

Parts NO. : EEC-PLB15UHG000



Item NO: 27

Parts name: Clip Core

Parts NO. : EEC-PLLF150G000



Item NO: 28

Parts name: 32C(S) Cush Top

Parts NO. : MP2-1000026G000



Item NO: 29

Parts name: 32C(S) Cush Bottom

Parts NO. : MP2-1000027G000



Item NO: 30

Parts name: 32C_side EPE Bag

Parts NO. : MP2-0000161G000



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Item NO: 31

Parts name: 232-S12 Carton_w/GP logo

Parts NO. : MX0-3000256G000



Item NO: 32

Parts name: AC Power Cord

Parts NO. : ECB-0318AW8G000



Item NO: 33

Parts name: LT23HVT Remote control

Parts NO. : EEC-RC0CG37G000



Item NO: 34

Parts name: CD-En-Fr_ATi_MTK (2 Series-1)

Parts NO. : MD0-CD00040G000



Item NO: 35

Parts name: Series Warranty Card w/ 226

Parts NO. : MK0-UM00132G000



Item NO: 36

Parts name: Battery 1.5V AAASize, GP(NV-UM4E)

Parts NO. : EEC-BAGP24GG000

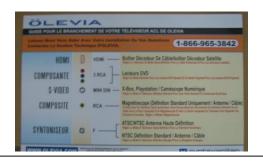


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Item NO: 37

Parts name: Olevia_HookUp_8_(En/Fr)

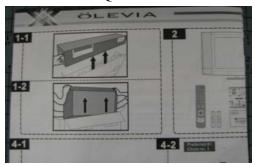
Parts NO. : MK0-UM00124G000



Item NO: 39

Parts name: QSG-En-Fr_ATi_226_227_232

Parts NO. : MK0-QS00059G000



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10. Block Diageam

ADA1 BLOCK DIAGRAM

